

TX station: 2xAkk2-90

Gain solid integration : disabled

Site Name: Labelitaly

**General data of Antenna System**

TX station	2xAkk2-90
Site Name	Labelitaly
System of coordinates	Geographic
Longitude	00°00'00.000"
Latitude	00°00'00.000"
Ground level a.s.l. (m)	100.0
Antenna system height (m)	50.0
Transmitter power(Watt)	1000.000
Carrier wave frequency (MHz)	98.000
Antenna system central frequency (MHz)	98.000
Antenna base diagrams type 1	LABEL ITALY-AKK_2V PANEL W.B. FM vertical pol.
Antenna base diagrams type 2	-
Polarization (H/V/C/X)	V
Transmitting cable attenuation (dB)	0.0
Additional attenuations(dB)	0.0
Base diagrams sectors (T = All, F = Front)	T
Velocity factor of cables to Antennas (0÷1)	0.88
Coordinate System(C = cartesian, P = polar)	P
Mast side / diameter(cm):	200.0
Mast cross section (T/Q/C)	Q
Structure rotation w.r.t. North (°)	0.0
Mast rotation w.r.t. North (°)	45.0

**Information about antennas used in the System**

	<i>Antenna type 1</i>
Manufacturer	LABEL ITALY
Antenna model	AKK_2V PANEL W.B. F
Band start(MHz)	88
Band stop(MHz)	105
diagrams Frequency(MHz)	98
Polariz (H,V,C,X)	V
Vertical dist (cm)	310
Height (cm)	174
Width (cm)	248
Thickness (cm)	80
Weight (Kg)	45
Maximum power (KW)	5
Gain (dBd)	8.1
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	0
R.C.Phase (°)	0

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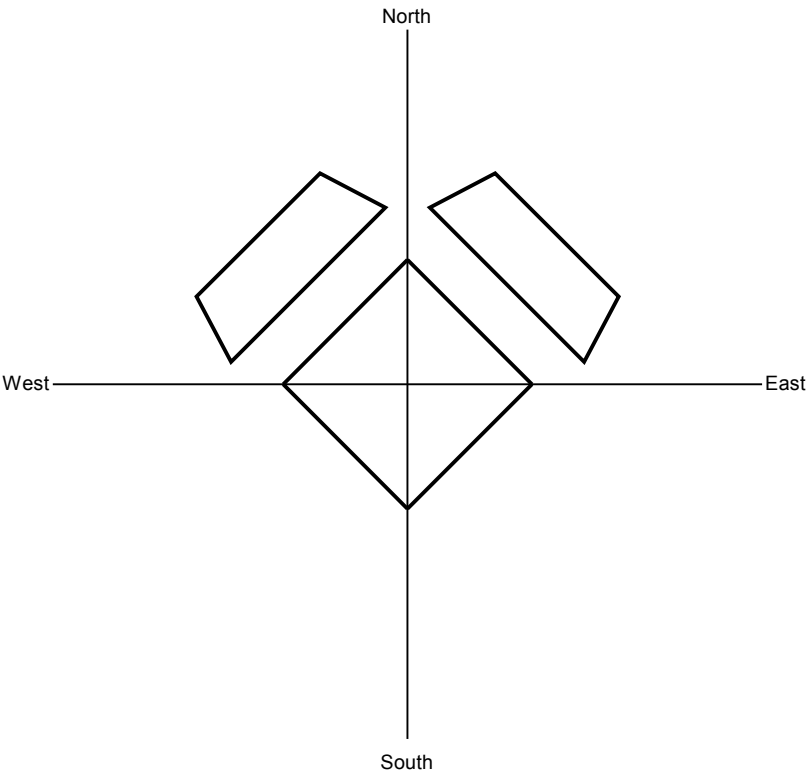
Geometr. and electrical data of Antenna System

	<i>Power</i> (%)	<i>Tilt</i> (°)	<i>Az.</i> (°/N)	<i>Phase</i> (°)		<i>V dist.</i> (m)	<i>Scr-d</i> (cm)	<i>Scr-Az</i> (°/N)	<i>Rot.</i> (1÷4)	<i>Type</i> (1÷2)	<i>L cables</i> (cm)	<i>Car. phase</i> (°)
1	50.000	0	315	0	+0.0	0.00	160.0	315.0	1	1	0.0	0.0
2	50.000	0	45	0	+0.0	0.00	160.0	45.0	1	1	0.0	0.0

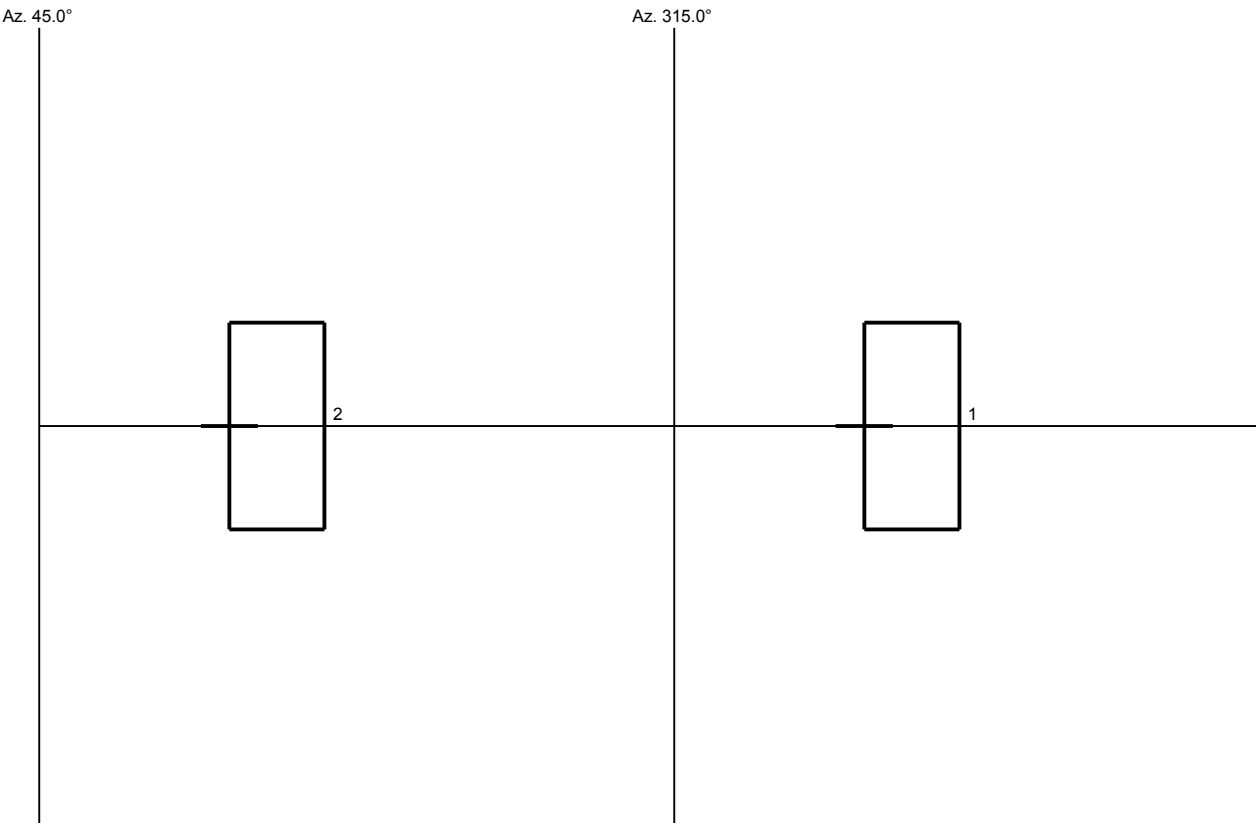
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Plan of antenna system



Side of antenna system



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Antennas arrays data

A. Antennas array azimuth (°/N)	45	315
B. Number of antennas	1	1
C. Nominal power supply (W)	500.00	500.00
D. Losses (addit. + cables) (dB)	0.0	0.0
E. Effective power supply (W)	500.00	500.00
F. Theor. maximum gain (dBd)	8.10	8.10
G. Distribution losses (dB)	0.00	0.00
H. Nominal max gain [F - G] (dBd)	8.10	8.10
I. Compensation losses (dB)	0.00	0.00
J. Effec. max gain [H - I] (dBd)	8.10	8.10
K. Effec. max gain (times)	6.46	6.46
L. Effec. max power [E * K] (KW)	3.2283	3.2283
M. Max power depr. angle (°)	-3.0	-3.0
N. Max power az. angle (°)	43	313

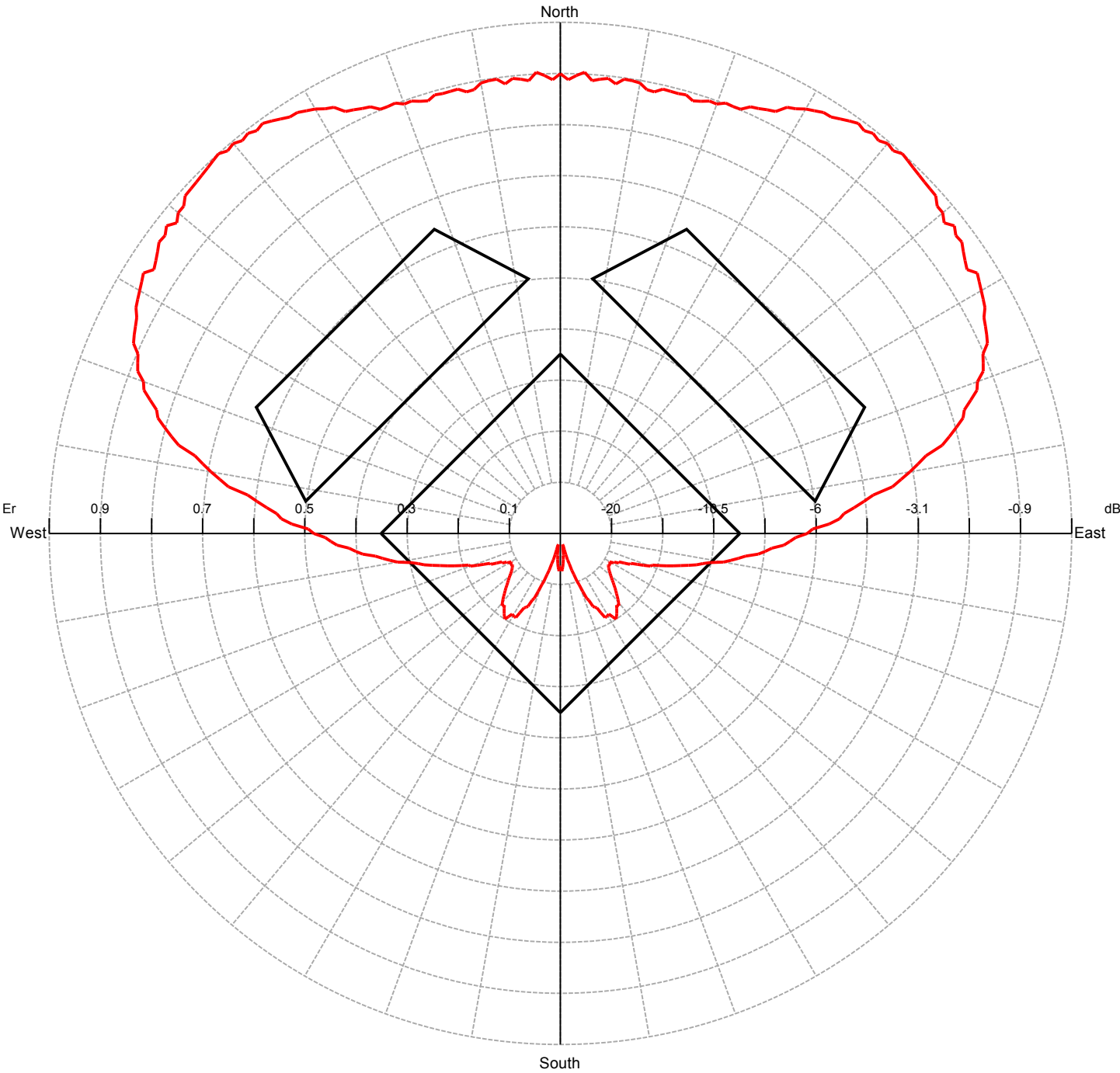
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	3.4	90	-2.0	180	-14.9	270	-2.0
10	3.3	100	-5.5	190	-14.9	280	1.1
20	3.3	110	-10.3	200	-14.9	290	3.1
30	3.9	120	-14.8	210	-10.3	300	3.8
40	4.3	130	-13.5	220	-10.8	310	4.1
50	4.1	140	-10.8	230	-13.5	320	4.3
60	3.8	150	-10.3	240	-14.8	330	3.9
70	3.1	160	-14.9	250	-10.3	340	3.3
80	1.1	170	-14.9	260	-5.5	350	3.3

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Horizontal diagram at 0.0° depres. (Total Antenna)

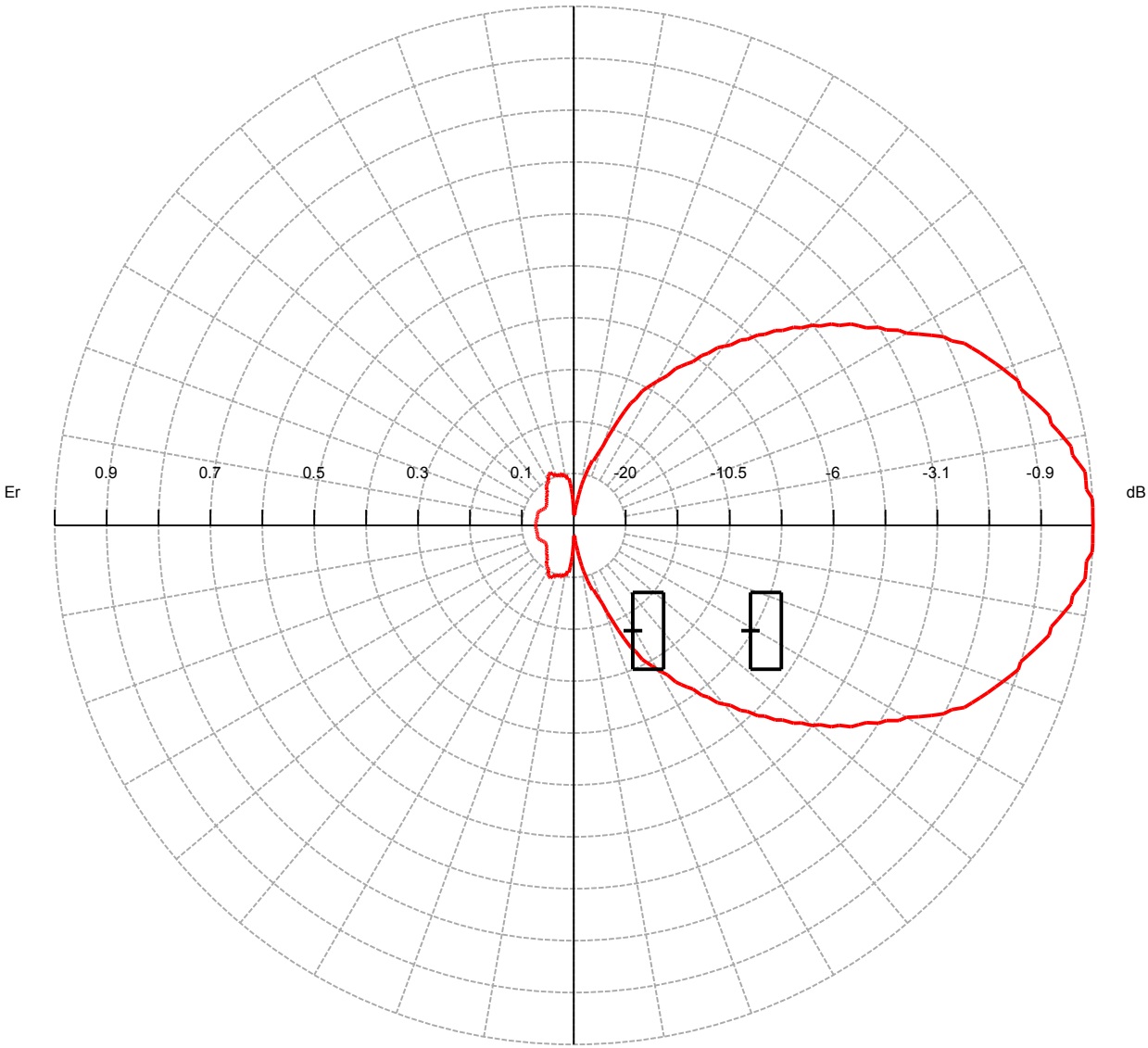


0.0° depres. (Total Antenna), Gain (dBd): 4.29 ERP T.Max(KW): 2.683 ERP E.Max(KW): 2.683

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 3.37

ERP T.Max(KW): 2.1707    ERP E.Max(KW): 2.1707